Amendments to the Claims:

- 1. (Currently Amended) A process for the preparation of hydrogen and a gas containing a mixture of hydrogen and carbon monoxide from methane, said process comprising:
- (a) partially oxidizing methane via a non-catalyzed reaction to prepare an effluent comprising a mixture of hydrogen and carbon monoxide having a temperature of above 700°C,
- (b) catalytically steam reforming methane in a zone wherein the feed has a steam to carbon ratio of less than 1 to prepare a steam reforming product having a hydrogen to carbon monoxide molar ratio of greater than 2, wherein heat for the steam reforming reaction is provided by convective heat exchange between the steam reformer reactor zone and the effluent of step (a), and
- (c) separating hydrogen from all or part of the steam reforming product of step (b) and feeding part of the steam reforming product of step (b) to step (a).
- 2. (Previously Presented) The process of claim 1, wherein the steam reforming product has a hydrogen to carbon monoxide molar ratio between 3 and 6.
- 3. (Previously Presented) The process of claim 1, wherein hydrogen is separated by membrane separation, by a pressure swing absorber step or by a membrane separation followed by a pressure swing absorber step.
- 4. (Previously Presented) The process of claim 1, wherein in step (c) hydrogen is separated from a part of the steam reforming product to produce a remainder part and that the remainder part of the steam reforming product, and the effluent of step (a) as obtained in step (b) is combined after having supplied heat to the steam reforming reactor zone in step (b).

Claim 5 (Canceled).

6. (Previously Presented) The process of claim 1, wherein the part of the steam reforming product is fed to step (a) such that this stream is mixed with the effluent of the partial oxidation

such that the temperature of the effluent of the partial oxidation is reduced by between 250°C and 500°C.

7. (Previously Presented) The process of claim 1, wherein the convective steam reformer zone comprises a tubular reactor provided with one or more tubes containing a reforming catalyst.

Claim 8 (Canceled).

- 9. (Previously Presented) The process of claim 1 further comprising:
- (d) catalytically converting the hydrogen and carbon monoxide into a stream comprising hydrocarbons via a Fischer-Tropsch process.
- 10. (Previously Presented) The process of claim 9 further comprising:
- (e) separating the stream of step (d) into a hydrocarbon product and a gaseous recycle stream wherein the gaseous recycle stream is fed to step (a) or step (b).
- 11. (Previously Presented) The process of claim 10 further comprising:
- (f) hydroconverting the hydrocarbon product of step (e) with the hydrogen from step (c).
- 12. (Previously Presented) The process of claim 11 wherein step (f) comprises hydrogenation.
- 13. (Previously Presented) The process of claim 11 wherein step (f) comprises hydroisomerization.